XXXIX.—*Observations on a specimen of the Black or Leading Whale,* Phocæna melas, *taken on the coast of Cornwall.* By Jonathan Couch, F.L.S., &c.

[With a Plate.]

However frequent may be the capture of the Black or Leading Whale in the more northern parts of the United Kingdom, opportunities for examining this somewhat remarkable species have not often occurred to naturalists; and those who have had occasion to publish a figure have for the most part been reduced to the necessity of copying, by which means it has happened that the representations of the species in even the most respectable works are found to be incorrect in some important particulars. On this account, and because the specimen now to be described was taken at a great distance from its most usual haunts, it is hoped that the following notice will be acceptable to the scientific public. The length in a straight line was 20 feet, but measured along the curve, from the upper lip to the end of the tail, 22½ feet; breadth of the tail, 4 feet 9 inches; from the base of the dorsal fin to the middle of the belly, as it lay, and consequently half round, 5 feet 8 inches. Height of the dorsal fin, 14 inches; measured over the back from the margin of the tail to the dorsal fin, 12 feet 9 inches; length of the base of this fin, 3 feet 5 inches. The head is small in proportion to the body; the forehead projecting in front, wide and remarkably rounded; a depression between the front and upper lip; angle of the mouth ascending, the lower jaw a little shorter than the upper; tongue large and fleshy; teeth small, round, in height from the gums scarcely exceeding one-third of an inch, standing separate, and inclined forward; those above rather the stoutest, the whole closing alternately between each other; front of the upper jaw having four cavities in the substance of the gum to receive corresponding teeth of the lower jaw. As well as could be counted, there were 20 teeth in each jaw. The eye small, narrow, a little above and slightly before the line of the angle of the mouth. Breathing-hole on the hinder part of the head, in a depression, with the valve closed circular, the curve backward. Pectoral fin 4 feet 9 inches in length, becoming very narrow, pointed, and directed backward; in shape somewhat like the wing of a swallow. Body large, round, plump; compressed through the posterior third of its length, which is ridged on its dorsal and ventral aspect, and growing rapidly, depressed at the tail, which organ is cut in a segment at the middle. The animal, a male, with a long furrow or channel from the vent forward along the belly, enclosing the penis, which is

about 2 feet in front of the vent. The cuticle is thin; the colour an intense black, smooth, like oiled silk; interrupted on the sides by several curious grooved marks, like the ridges on some species of shells; two long parallel lines low on the side united by another anteriorly. Under the throat a broad white mark, heart-shaped towards the throat, and extending backward no further than the pectoral fins, behind which it is faint and narrow. There was a notch in the dorsal fin, probably peculiar to the individual; it was otherwise falcate posteriorly.

There can be no question of this being the *Delphinus melas* of Fleming, *D. Deductor* of Scoresby, *Phocæna melas* of Bell, 'British Quadrupeds,' p. 483; and consequently, as referred to *Delphinus melas* of Trail, *D. globiceps* of Cuvier, and *Globicephalus Deductor* of Jardine; but whilst the descriptions given by these naturalists are sufficiently minute and accurate to decide the species, they in common with their accompanying figures have the misfortune to fail in some important particulars, which may lead to error if it shall be found that a nearly allied species exists. The figure in Mr. Bell's work is confessedly taken from Cuvier; and though I have no opportunity of consulting the 'Ann. du Muséum,' in which the paper of the great French naturalist is contained, or the work on Cetaceans of his brother, yet I think it fair to conclude that it is correctly copied. The singularity of position, however, given to the tail, as thrown up over the back, and the attenuated form assigned to the figure both of Scoresby and Bell (though most obvious in the latter), lead to a suspicion that the latter is indebted for its existence to the former, and consequently that the engraving of Dr. Trail, whom Scoresby has followed, is the only undoubted original.

The following notes, which were made when comparing the figures of Bell (derived from Cuvier) and Scoresby (whose description at least is from Trail) with the animal itself lying favourably before me, and my own sketch and description, will point out the differences between the former and the latter. In Mr. Bell's work the bulk is much too slender, especially on the anterior portion; and not enough compressed posteriorly, nor sufficiently ridged on that part above and below. The caudal fin is too much divided and attenuated at the sides; for though a single specimen might chance to die in the attitude given, nothing short of an error in the outline could represent the corner of the tail so long and slender. The forehead also is not sufficiently prominent and globular; the teeth are too numerous and conspicuous; the under jaw is too much projecting. Jenyns represents the teeth as conical and *sharp*; whereas

in the present instance their points were blunt. The pectoral fin is not well represented in the figures; and the dorsal is placed too far behind, its exact position being, as far as the eye can judge, just above the centre of gravity. As the proper situation of this organ is an important character of the species, it is carefully given in the figure which accompanies this paper. (Plate VII.)

I am sorry that, with so favourable an opportunity, I am not able to add anything on the subject of the internal structure of the animal; but after having bargained with the possessors for the bones, especially of the head, when they should have finished their exhibition to the public, they were afterwards sold without my knowledge for a higher price.

Perhaps the manner in which this whale was taken may in some degree illustrate its history, for it has been observed that most of the cetaceous animals taken in England have run themselves on shore; a circumstance which has been ascribed, with much appearance of probability, to the influence of sickness. On the 29th of March in the present year, the specimen here described was seen to approach and strike its head against a rock on the east shore of Looe Island; and the blow was followed by a discharge of blood, it is believed from the mouth, since no wound was afterwards discovered. It afterwards moved off into free water, but returned to the shore, among the rocks of which it became entangled; thus affording the two or three men who were present an opportunity of fastening a rope round the root of its tail. As the tide receded it was left dry, and died in about the space of six hours.

Polperro, 1842.

XL.—*The Birds of Ireland.* By Wm. Thompson, Esq., Vice-Pres. Nat. Hist. Society of Belfast.

[Continued from p. 230.]

No. 13.—*Hirundinidæ.*

Common Swallow, *Hirundo rustica*, Linn. This species is by far the most common of the *Hirundinidæ* in Ireland. It arrives the second in order, the sand martin preceding it. The first week of April is the earliest time I have known it to appear about Belfast, the second week of that month being the ordinary period, and seldom is it looked for in vain upon the tenth day*.

* From newspaper paragraphs it would appear that it occasionally comes earlier. In the Belfast Commercial Chronicle of April 1835, it was stated that swallows had been seen about Larne on the 2nd of the month. The contributors of such notices rarely discriminate the different species of *Hirundo*, and the term swallow is used generically, or applied to the three